

PRODUCT DATASHEET

ES-FM-H01-OD070-TOP66NM-001

Frameless Torque Motor

Hollow Shaft Frameless Torque Motors | ES-FM-H01-OD070 Hollow-Shaft 70 mm Frameless Torque Motor Series

Product Overview

Frameless Torque Motor with rated Speed 3650 rpm, continuous Rated Output Power 252 W and lead Wire Length 100 mm, no connector.

Typical Applications

Robot joints | Direct-drive rotary axes | Integrated actuator modules

Configuration Context

Temperature sensor: NTC

Key Specifications

PARAMETER	VALUE	UNIT
Rated Speed	3650	rpm
Continuous Rated Output Power	252	W
Lead Wire Length	100 mm, no connector	
Line-to-Line Inductance	0.295	mH
Line-to-Line Resistance	0.3	Ω
Maximum Rotational Speed	4570	rpm
Motor Outer Diameter	70	mm
Motor Version	Version P	
Operating Supply Voltage	48	V DC

Technical Specifications

PARAMETER	SPECIFICATION	UNIT
PERFORMANCE		
Rated Speed	3650	rpm
Continuous Rated Output Power	252	W
Maximum Rotational Speed	4570	rpm
ELECTRICAL		
Line-to-Line Inductance	0.295	mH
Line-to-Line Resistance	0.3	Ω
Operating Supply Voltage	48	V DC
Rated Current	6.1	A
THERMAL		
Temperature Sensor	NTC	
MECHANICAL		
Motor Outer Diameter	70	mm
Rotor Diameter	42	mm
Stator Core Height	11	mm
INTEGRATION		
Lead Wire Length	100 mm, no connector	
CONFIGURATION		
Motor Version	Version P	

2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 1	Section view identifier	Section G-G
	Datum A	
	Left maximum outside diameter	Diameter 66 maximum
	Left minimum diameter	Diameter 49.6 minimum
	Bore diameter with unilateral tolerance	Diameter 42 +0.039/0
	Right minimum diameter	Diameter 49.6 minimum
	Right maximum outside diameter	Diameter 66 maximum
	Overall axial dimension	69 ±0.037
	Geometric tolerance relative to datum A	Geometric tolerance diameter 0.08 relative to datum A
	Internal horizontal dimension	15; tolerance not fully OCR-confirmed
Mechanical View 2	Section indicator G-G	Section/cutting-plane indicator G-G

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01 Specifications are subject to change without notice. Verify the current product configuration before final design release.

02 2D drawings, CAD files and integration documentation are controlled documents and are supplied separately on request.